

B-4 Traffic Patterns [40 CFR 122.25(a)(10)]

The MDC-St. Louis facilities are in the southeast corner of the intersection of Lindbergh and McDonnell Boulevards. Access to the McDonnell Douglas Storage facilities is off McDonnell Blvd., Lindbergh Blvd., or Banshee Road.

Figure B-7 shows the onsite traffic pattern. The main road, parking lots, and dead-end roads are two-way. Most cars are confined to the parking lot and entrance road. Within the plant, traffic vehicles consist mostly of fork lifts and trucks. Numerous trucks and semitrailers enter the plant each day.

Traffic Control: Traffic is controlled by stop signs, traffic lights, and security guards. These are also indicated in Figure B-7.

Access Road Surfacing: All roads are constructed of either bituminous concrete pavement (blacktop) over a gravel base or bituminous concrete pavement over a concrete base.

Load-Bearing Capacity. All roads are capable of bearing loads up to 16,000 pounds per a single axle, or 32,000 pounds per a tandem axle. The bulk tanker truck or van trailers used to remove inventory from the tank storage or drum storage area has an empty weight of approximately 28,000 pounds, and a loaded weight of approximately 72,000 pounds. Therefore, the facility roads can bear the weight of the trucks.

Traffic Control Signals: The traffic control signal lights are controlled by MDC security guards when not on blinking yellow caution.



R00148181
RCRA RECORDS CENTER

SECTION C

WASTE CHARACTERISTICS

This section describes the chemical and physical nature of the hazardous wastes stored at the McDonnell Douglas Corp. - St. Louis (MDC - ST. Louis) facility and the Waste Analysis Plan for sampling, testing, and evaluating the wastes to assure that sufficient information is available for their safe handling. The information submitted is in accordance with the requirements of 40 CFR §122.25(a)(2) and (3).

C-1 Chemical and Physical Analyses (40 CFR 122.25(a)(2)) and (10CSR25-7.011 (3)(c))

List of Hazardous Wastes stored at the Facility: Hazardous wastes are stored at this facility in 55-gallon drum containers, underground, inground and above ground tanks and a containerized explosive storage building. The capability of these areas are as follows:

- I) Containers - 37,620 Gallons
- II) Two - 10,000 Gallon above ground tanks
- III) Five - 500 Gallon above ground tanks
- IV) Six - 750 Gallon above ground tanks
- V) One - 3,000 Gallon below ground tank
- VI) One - 2,000 Gallon below ground tank
- VII) One - 2,000 Gallon below ground tank
- VIII) One - 5,000 Gallon below ground tank
- IX) One - 1,000 Gallon below ground tank
- X) One - 120,000 Gallon inground tank
- XI) Explosive Storage Building - 30,300 Gallons - Containerized

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- IV) The six - 750 Gallon above ground tanks are used to hold waste acid solution (nitric acid, hydroflouric acid) from titanium chemical milling. The production department process tank drain is connected to these tanks and only this waste solution enters the storage tanks. This waste is hazardous due to Corrosivity (pH) (D002). Leaks are contained by a two stage impervious asphalt curb. Each curbed area is drained into the previously mentioned industrial waste water sewer. This curb system is designed so that if the primary curbing fails for any reason, the secondary curb system will provide 100% redundancy.
- V) The one - 3,000-gallon underground tank is used to hold waste turbine engine (Jet Aircraft) fuel and hydraulic system spillage. This tank accumulates waste in two fashions. First, an oil separator serves an area where aircraft have their engines adjusted. Any spills or leaks during this operation enter this separator and are diverted to the underground tank. Second, when an aircraft is fueled, catch dollies are positioned at the aircraft tank vents to collect overfilling. These dollies are emptied directly into this underground tank. This waste is hazardous due to Ignitability (Flash Point) (D001). The tank is equipped with a liquid level sensing system that indicates when the tank is approximately 80% full. This system signals this condition in the area maintenance shop and is used to determine removal frequency. Leaks are monitored by a hydrocarbon sensing system that is installed in a monitoring well located adjacent to this buried tank.

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- VI) The one - 2,000-gallon underground tank is used to collect and hold waste turbine engine (Jet aircraft) fuel that is spilled during fueling or de-fueling operations. This tank is equipped with a level indicator system that sounds an alarm when it becomes approximately 75% full. This alarm alerts area maintenance to initiate waste removal activities. This waste is hazardous due to Ignitability (Flash Point) (D001). Leaks are monitored by a hydrocarbon sensing system that is installed in a monitoring well located adjacent to this buried tank.
- VII) The one - 2,000-gallon underground tank is used to collect waste turbine engine (jet engine) fuel and Hydraulic system spillage. An oil separator serves the work area. Any spills that occur enter the separator and are diverted to the underground tank. This waste is hazardous due to Ignitability (Flash Point) (D001). This tank is equipped with a level indicator system that flashes an alarm when it becomes approximately 75% full. This alarm alerts area maintenance to initiate waste removal activities. Leaks are monitored by a hydrocarbon sensing system that is installed in a monitoring well located adjacent to this buried tank.
- VIII) The one - 5,000-gallon underground tank is used to hold jet aircraft fuels that are leaked or spilled during the testing of aircraft fuel systems. Fuels enter a separator where they are diverted into this underground tank. This waste is hazardous due to Ignitability (Flash Point) (D001). Leaks are monitored by a hydrocarbon sensing system that is installed in a monitoring well located adjacent to this buried tank.

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- IX) The one - 1,000-gallon underground tank is used to hold oil that has been separated from the condensate of an oil lubricated, steam operated compressor. This waste contains more than 10% oil and is therefore defined as hazardous waste by Missouri Regulation 10 CSR 25-4.020. Leaks are monitored by a hydrocarbon sensing system that is installed in a monitoring well located adjacent to this buried tank.

- X) The one - 120,000-gallon inground tank is an open top tank. This tank is used to contain waste water treatment sludge prior to dewatering. This sludge is a hazardous waste from non-specific source (F006 and F019). The only fill line to this inground tank is from the sludge accumulating tanks of the waste water pretreatment plant. This inground tank is equipped with an overflow drain which leads to the influent of our waste water pretreatment plant.

- XI) The 30,300-gallon storage area is used to contain ammunition and explosives that have been declared waste because they are outdated or have been damaged. This area is a designated section of the building that is used to contain the non-waste ammunition and explosives.

Step 7B (continued)

necessary manifest. Once the drums are received in the Container Storage area, the EPC operator keeps daily records of the inventory, and upon accumulation of sufficient quantity, initiates a removal to a treatment or disposal facility. The analysis of the drum contents has already been obtained in Step 6.

C-2a Parameters and Rationale

Table C-1 shows the various hazardous wastes that may be stored at this facility, the analytical parameters that apply to each, the rationale for their selection, the D O T shipping name and the D O T identification number.

C-2b Test Methods

Table C-2 shows the test methods that are used to measure the analytical parameters. All test methods are from Methods for Chemical Analysis of Water and Waste EPA-600/4-79/020 March 1979, or other EPA-approved methods.

C-2c&d Sampling Methods/Frequency of Analysis

Table C-3 lists 1) the methods used to sample each of our Hazardous Waste streams and 2) the frequency of analysis. Note that this frequency is based on no known changes occurring in the individual hazardous waste stream therefore this will provide proof of no change. When known changes do occur, we perform a waste stream analysis to determine if there is any change in the Hazardous Waste characteristics.

TABLE C-1
WASTE CHARACTERISTICS

PARAMETERS AND RATIONALE FOR THEIR SELECTION

<u>MO ID NO.</u>	<u>HAZARDOUS WASTE</u>	<u>HAZARDOUS PARAMETER</u>	<u>RATIONALE</u>	<u>DOT PROPER SHIPPING NAME</u>	<u>DOT ID NUMBER</u>
001	Waste Acid solution from Titanium metal surface cleaning. (Nitric & Chromic Acid)	pH; E P Toxicity (Cr ⁺⁶)	This solution is a Hazardous Waste due to E P Toxicity (D007) and corrosivity (D002).	Waste Corrosive Liquid, N.O.S.	UN1760
002	Waste solution from nickel plating removal (Cyanide)	Reactivity (Cyanide)	This solution is a Hazardous Waste due to Reactivity (D003).	Waste Corrosive Liquid, Poison, N.O.S.	UN2922
003	Waste Acid solution from Oxide removal on aluminum and titanium surfaces. (Nitric Acid, Potassium Dichromate, Potassium Nitrate, Sodium Bifluoride)	pH; E P Toxicity (Cr ⁺⁶)	This solution is a Hazardous Waste due to E P Toxicity (D007) and corrosivity (D002).	Waste Corrosive Liquid, N.O.S.	UN1760
004	Waste Acid solution from a chemical conversion coating process of aluminum and titanium surfaces (Chromic Acid)	pH; E P Toxicity (Cr ⁺⁶)	This solution is a Hazardous Waste due to E P Toxicity (D007) and corrosivity (D002).	Waste Corrosive Liquid, N.O.S.	UN1760
005	Waste alkaline solution from paint stripping (Postassium Hydroxide with Phenol)	ph; E P TOXICITY (Cr ⁺⁶)	This solution is a Hazardous Waste due to E P Toxicity (D007).	Waste Potassium Hydroxide Solution	UN1814

TABLE C-1

MO ID NO.	HAZARDOUS WASTE	HAZARDOUS PARAMETER	RATIONALE	DOT PROPER SHIPPING NAME	DOT ID NUMBER
006	Waste acid and chlorinated solvent from paint stripping (Hydrofluoric Acid with Phenol and Methylene Chloride)	E P Toxicity (Cr ⁺⁶) (Listed Waste)	This solution is a Hazardous Waste due to E P Toxicity (D007) and is a generic Hazardous Waste (F002).	Waste Corrosive Liquid, N.O.S.	UN1759
007	Waste acid solution from deoxidizing and cleaning aluminum surfaces. (Potassium Dichromate, Potassium Nitrate, Potassium Bifluoride)	pH; E P Toxicity (Cr ⁺⁶)	This solution is a Hazardous Waste due to E P Toxicity (D007) and corrosivity (D002).	Waste Corrosive Liquid, N.O.S.	UN1760
008	Waste acid solution from a chemical conversion coating process of aluminum and titanium surfaces (Chromic Acid Fluorides, Ferricyanide)	pH; E P Toxicity (Cr ⁺⁶); Reactivity (Ferricyanide)	This solution is a Hazardous Waste due to E P Toxicity (D007); Corrosivity (D002); and Reactivity (D003).	Waste Corrosive Liquid, N.O.S.	UN1760
009	Waste acid and chlorinated solvent solution from a coating removal operation. (Methylene Chloride, Formic Acid, Phenol)	pH; (Listed Waste)	This solution is a Hazardous Waste due to corrosivity (D002) and is a generic waste (F002).	Waste Corrosive Liquid, N.O.S.	UN1760
010	Waste acid solution from aluminum metal surface cleaning (Sulfuric Acid, Sodium Dichromate)	pH; E P Toxicity	This solution is a Hazardous Waste due to E P Toxicity (D007) and corrosivity (D002).	Waste Sulfuric Acid Mixture	UN1830

TABLE C-1

<u>MO ID NO.</u>	<u>HAZARDOUS WASTE</u>	<u>HAZARDOUS PARAMETER</u>	<u>RATIONALE</u>	<u>DOT PROPER SHIPPING NAME</u>	<u>DOT ID NUMBER</u>
011	Waste acid solution from cleaning of aluminum tubing, (Nitric Acid, Ammonium Bifluoride)	pH	This solution is a Hazardous Waste due to corrosivity (D002)	Waste Corrosive Liquid, N.O.S.	UN1760
012	Waste acid solution from cleaning and pickling aluminum and titanium. (Nitric & Hydrofluoric Acid)	pH; E P Toxicity (Cr ⁺⁶)	This solution is a Hazardous Waste due to corrosivity (D002); and E P Toxicity (D007)	Waste Corrosive Liquid, N.O.S.	UN1760
013	Waste acid solution from chromic acid anodizing of aluminum and titanium. (Chromic Acid)	pH; E P Toxicity (Cr ⁺⁶)	This solution is a Hazardous Waste due to corrosivity (D002); and E P Toxicity (D007).	Waste Corrosive Liquid, N.O.S.	UN1760
014	Waste acid solution from an aluminum hard coating operation (Sulfuric and Oxalic Acid)	pH; E P Toxicity (Cr ⁺⁶)	This solution is a Hazardous Waste due to corrosivity (D002) and E P Toxicity (D007).	Waste Corrosive Liquid, N.O.S.	UN1760
015	Waste acid solution from titanium pickle. (Nitric and Hydrofluoric Acid)	pH; E P Toxicity (Cr ⁺⁶)	This solution is a Hazardous Waste due to corrosivity (D002); and E P Toxicity (D007)	Waste Corrosive Liquid, N.O.S.	UN1760
016	Waste acid from stainless steel pickle or pretreatment. (Hydrochloric Acid)	pH; E P Toxicity (Cr ⁺⁶)	This solution is a Hazardous Waste due to corrosivity (D002); and E P Toxicity (D007).	Waste Hydrochloric Acid	UN1789

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<u>MO ID NO.</u>	<u>HAZARDOUS WASTE</u>	<u>HAZARDOUS PARAMETER</u>	<u>RATIONALE</u>	<u>DOT PROPER SHIPPING NAME</u>	<u>DOT ID NUMBER</u>
017	Waste solution from stripping cadmium plating. (Ammonium Nitrate)	E P Toxicity (Cd)	This solution is a Hazardous Waste due to E P Toxicity (D006)	Waste Ammonium Nitrate Solution	NA2426
018	Waste acid solution from magnesium pickle (Chromic Acid, Ferric Nitrate, Potassium Fluoride)	pH; E P Toxicity (Cr ⁺⁶)	This solution is a Hazardous Waste due to corrosivity (D002) and E P Toxicity (D007).	Waste Corrosive Liquid, N.O.S.	UN1760
019	Waste acid solution from cleaning and pickling aluminum and titanium. (Nitric & Hydrofluoric Acid)	pH; E P Toxicity (Cr ⁺⁶)	This solution is a Hazardous Waste due to corrosivity (D002) and E P Toxicity (D007).	Waste Corrosive Liquid, N.O.S.	UN1760
020	Waste acid from stainless steel pickle or pretreatment (Hydrochloric Acid)	pH; E P Toxicity (Cr ⁺⁶)	This solution is a Hazardous Waste due to corrosivity (D002) and E P Toxicity (D007).	Waste Hydrochloric Acid	UN1789
021	Waste acid from a stainless steel cleaning process (Hydrofluoric and Sulfuric Acid)	pH	This solution is a Hazardous Waste due to corrosivity (D002).	Waste Corrosivity Liquid, N.O.S.	UN1760

TABLE C-1

MO ID NO.	HAZARDOUS WASTE	HAZARDOUS PARAMETER	RATIONALE	DOT PROPER SHIPPING NAME	DOT ID NUMBER
022	Waste acid solution and sludge from various metal etching & cleaning (Nitric, Chromic and Hydrofluoric Acid)	pH; E P Toxicity (Cr ⁺⁶) (Pb)	This solution is a Hazardous Waste due to corrosivity (D002) and E P Toxicity (D007) (D008).	Waste Corrosive Liquid, N.O.S.	UN1760
023	Waste acid solution from metal surface passivation. (Nitric Acid)	pH	This solution is a Hazardous Waste due to corrosivity (D002).	Waste Nitric Acid	UN2031
024	Waste alkaline solution from stripping of Chromium plating. (Sodium Hydroxide, Sodium Carbonate, Sodium Phosphate, Chromium)	pH; E P Toxicity (Cr ⁺⁶)	This solution is a Hazardous Waste due to corrosivity (D002) and E P Toxicity (D007).	Waste Sodium Hydroxide Solution	UN1824
025	Waste alkaline solution from derust cleaning of metal parts. (Sodium Hydroxide, Triethanolamine, Sodium Gluconate, Kerosene)	pH; E P Toxicity (Cr ⁺⁶) (Cd)	This solution is a Hazardous Waste due to corrosivity (D002) and E P Toxicity (D007) (D006).	Waste Alkaline Liquid, N.O.S.	NA1719
026	Waste alkaline solution from cadmium cyanide plating operation (Sodium Cyanide, Sodium Hydroxide, Cadmium Oxide, Sodium Carbonate)	E P Toxicity (Cd) (NaCN)	This solution is a Hazardous Waste due to E P Toxicity (D006) and Reactivity (D003).	Waste Corrosive Liquid, Poison, N.O.S.	UN2922

TABLE C-1

MO ID NO.	HAZARDOUS WASTE	HAZARDOUS PARAMETER	RATIONALE	DOT PROPER SHIPPING NAME	DOT ID NUMBER
027	Waste acid solution from sulfuric acid anodizing of aluminum (Sulfuric Acid)	pH; E P Toxicity (Cr ⁺⁶)	This solution is a Hazardous Waste due to E P Toxicity (D007) and corrosivity (D002).	Waste Corrosive Liquid, N.O.S.	UN1760
028	Waste Potassium Dichromate solution from anodize sealing	E P Toxicity (Cr ⁺⁶)	This solution is a Hazardous Waste due to E P Toxicity (D007).	Waste Corrosive Liquid, N.O.S.	UN1760
029	Waste alkaline cleaning solution from cleaning aluminum (Sodium Tripoly Phosphate, Sodium Borate, Sodium Nitrate, Sodium Chromate)	E P Toxicity (Cr ⁺⁶)	This solution is a Hazardous Waste due to EP Toxicity (D007).	Hazardous Waste, Liquid, N.O.S.	NA9189
030	Waste alkaline solution from scale conditioning of titanium. (Sodium Hydroxide, Sodium Chromate)	E P Toxicity (Cr ⁺⁶)	This solution is a Hazardous Waste due to E P Toxicity (D007).	Waste Sodium Hydroxide Solution	UN1824
031	Waste Ferric Chloride solution from metal etching.	pH; E P Toxicity (Cr ⁺⁶)	This solution is a Hazardous Waste due to corrosivity (D002) and E P Toxicity (D007).	Waste Ferric Chloride Solution	UN2582
032	Waste acid from deoxidizing and cleaning aluminum surfaces.	pH; E P Toxicity (Cr ⁺⁶)	This solution is a Hazardous Waste due to corrosivity (D002) and E P Toxicity (D007).	Waste Corrosive Liquid, N.O.S.	UN1760

TABLE C-1

MO ID NO.	HAZARDOUS WASTE	HAZARDOUS PARAMETER	RATIONALE	DOT PROPER SHIPPING NAME	DOT ID NUMBER
033	Waste alkaline solution from derust cleaning of metal part. (Sodium Hydroxide, Triethanolamine, Sodium Gluconate, Kerosene)	pH; E P Toxicity (Cr ⁺⁶) (Cd)	This solution is a Hazardous Waste due to E P Toxicity (D007).	Waste Alkaline Liquid, N.O.S.	NA1719
034	Waste acid solution from chemmilling of titanium.	pH	This solution is a Hazardous Waste due to corrosivity (D002).	Waste Corrosive Liquid, N.O.S.	UN1760
035	Waste alkaline solution from aluminum chemical milling.	E P Toxicity (Cr ⁺⁶) and reactivity (S ²)	This solution is a Hazardous Waste due to E P Toxicity (D007) and Reactivity (D003).	Waste Sodium Hydroxide Solution	UN1824
036	Sludge from industrial waste water pretreatment plant.	Listed Waste	This is a Hazardous Waste because it is a waste water treatment sludge from electroplating operations (F006) and aluminum chemical conversion (F019).	Hazardous Waste, Liquid, N.O.S.	NA9189
037	Water emulsified cutting oil from cutting and machining aluminum, titanium and ferrous base metals and alloys.	Missouri Listed Waste	Contains more than 10% oil and is defined as hazardous waste by Mo. Regulation 10 CSR 25-4.020.	Not Regulated	Not Regulated
038	Solid Hazardous Waste from aircraft painting & servicing.	E P Toxicity (Pb)	This is a Hazardous Waste due to EP Toxicity (D008).	Hazardous Waste, Solid, N.O.S.	NA9189

TABLE C-1

MO ID NO.	HAZARDOUS WASTE	HAZARDOUS PARAMETER	RATIONALE	DOT PROPER SHIPPING NAME	DOT ID NUMBER
039	Explosive devices which have exceeded their service life or have been damaged so that they are not usable.	Explosive devices D.O.T. Class "B" and "C"	This material is a Hazardous Waste due to reactivity (D003).	Hazardous Waste, Solid, N.O.S.	NA9189
040	Waste paint sludge from aircraft and building maintenance.	E P Toxicity (CR ⁺⁶)	This material is a Hazardous Waste due to the E P Toxicity (D007).	Hazardous Waste, Solid, N.O.S.	NA9189
041	Waste chlorinated solvents from metal cleaning and degreasing operations.	Trichloroethylene, methylene chloride, 1,1,1-trichloroethane (Listed Waste)	This material is a Hazardous Waste from nonspecific sources (F001, F002)	Waste ORM-A, N.O.S.	NA1693
042	Waste jet fuel contaminated with water.	Flash Point	This waste is ignitable (D001).	Waste Flammable Liquid, N.O.S.	UN1993
043	Mixed waste solvents.	Acetone, xylene, toluene, methyl ethyl ketone (Listed Waste)	Flash point; this waste is ignitable, and a Hazardous Waste from nonspecific sources (F003, F005).	Waste Flammable Liquid, N.O.S.	UN1993
044	Waste hydraulic and motor oil	Missouri (Listed Waste)	Contains more than 10% oil and is defined as hazardous waste by Mo. Regulation 10 CSR 25-4.020.	Hazardous Waste, Liquid, N.O.S.	NA9189
045	Waste coolant from metal cutting (triethanolamine, sodium nitrite, potassium chromate).	E P Toxicity (Cr ⁺⁶)	This solution is Hazardous Waste due to E P Toxicity (D007).	Hazardous Waste, Liquid, N.O.S.	NA9189

TABLE C-1

MO ID NO.	HAZARDOUS WASTE	HAZARDOUS PARAMETER	RATIONALE	DOT PROPER SHIPPING NAME	DOT ID NUMBER
046	Waste paint stripper (methylene chloride)	E P Toxicity (Pb) (Listed Waste)	This material is a Hazardous Waste due to E P Toxicity (D008) and is a Generic Hazardous Waste (F002).	Waste Dichloromethane Mixture	UN1593
047	Waste Stoddard Solvent.	Flash Point	This is an ignitable waste. (D001).	Waste Flammable Liquid, N.O.S.	NA1993
048	Waste scale remover from cleaning boilers and cooling coils (hydrochloric acid).	pH	This solution is a Hazardous Waste due to corrosivity (D002).	Waste Hydrochloric Acid	UN1789
049	Waste solution and sludge from developing x-ray film, photos, microfiche and microfilm (Silver sludge).	E P Toxicity (Ag)	This solution is a Hazardous Waste due to E P Toxicity (D011).	Hazardous Waste, Liquid, N.O.S.	NA9189
050	Empty containers which have contained hazardous waste.	Para. 261.33(C)	These containers have held a commercial chemical product listed in Para. 261.33(C) and have not been triple rinsed. MO Waste (MK13)		
052	Waste Sodium Bicarbonate with Phenol	E P Toxicity (As)	This solution is a Hazardous Waste due to E P Toxicity (D004).	Not Regulated	Not Regulated

TABLE C-1

<u>MO ID NO.</u>	<u>HAZARDOUS WASTE</u>	<u>HAZARDOUS PARAMETER</u>	<u>RATIONALE</u>	<u>DOT PROPER SHIPPING NAME</u>	<u>DOT ID NUMBER</u>
053	Waste Sodium Bicarbonate used to neutralize an acid spill.	E P Toxicity (Cr ⁺⁶)	This is a Hazardous Waste due to E P Toxicity (D007).	Not Regulated	Not Regulated
054	Compressed gases.	Para. 261.33	These wastes are listed commercial chemical products. (Ignitable, corrosive, hazardous, toxic)		
056	Waste acid solution for stripping nickel plating.	E P Toxicity (Cd, Cr ⁺⁶), Pb)	This solution is Hazardous Waste due to E P Toxicity (D006, D007, D008).	Waste Corrosive Liquid, N.O.S.	UN1760
057	Sodium hydroxide solids from fume scrubber.	pH	This is a Hazardous Waste due to corrosivity (D002).	Waste Corrosive Solids, N.O.S.	UN1759
059	Synthetic fuel (fuel oil and coal and water).	Missouri (Listed Waste)	This is a Hazardous Waste because it contains more than 10% oil and is defined as Hazardous Waste by MO Regulation 10 CSR 25-4.020.	Not Regulated	Not Regulated
061	Waste sodium hydroxide solution.	pH	This solution is a Hazardous Waste due to corrosivity (D002).	Waste Sodium Hydroxide Solution	UN1824

TABLE C-1

<u>MO ID NO.</u>	<u>HAZARDOUS WASTE</u>	<u>HAZARDOUS PARAMETER</u>	<u>RATIONALE</u>	<u>DOT PROPER SHIPPING NAME</u>	<u>DOT ID NUMBER</u>
062	Waste solution from removal of organic coatings on various metals (formic acid, methylene chloride).	pH, E P Toxicity (Cd, Pb)	This solution is Hazardous Waste due to corrosivity (D002) and E P Toxicity (D006 and D008).	Waste Corrosive Liquid, N.O.S.	UN1760
065	Waste alkaline cleaner.	E P Toxicity (Pb)	This solution is Hazardous Waste due to E P Toxicity (D008).	Hazardous Waste, Liquid, N.O.S.	NA9189
066	Chrome plating solution (chromic acid)	pH, E P Toxicity (Cd, Cr ⁺⁶ , Pb)	This solution is Hazardous Waste due to corrosivity (D002) and E P Toxicity (D006, D007, D008).	Waste Corrosive Liquid, N.O.S.	UN1760
067	Waste chrome plating sludge.	pH, E P Toxicity (Cd, Cr ⁺⁶ , Pb)	This sludge is Hazardous Waste due to corrosivity (D002) and E P Toxicity (D006, D007, D008).	Waste Corrosive Liquid, N.O.S.	UN1760
068	Cadmium plating solution.	pH, E P Toxicity (Cd, Cr ⁺⁶)	This solution is a Hazardous Waste due to corrosivity (D002) and E P Toxicity (D006, D007).	Waste Corrosive Liquid, N.O.S.	UN1760
069	Plating solution for ferrous and non-ferrous alloys (nickel sulfamate, boric acid).	E P Toxicity (Cd)	This solution is a Hazardous Waste due to E P Toxicity (D006)	Hazardous Waste, Liquid, N.O.S.	NA9189

TABLE C-1

MO ID NO.	HAZARDOUS WASTE	HAZARDOUS PARAMETER	RATIONALE	DOT PROPER SHIPPING NAME	DOT ID NUMBER
070	Phosphatizing of ferrous metal (phosphoric acid).	E P Toxicity (Cd, Pb) Reactivity (CN)	This solution is a Hazardous Waste due to E P Toxicity (D006, D008) Reactivity D003.	Waste Corrosive Liquid, N.O.S.	UN1760
075	Mold material for die-casting metals.	pH, E P Toxicity (As, Ba, Cd, Pb, Se)	This solution is a Hazardous Waste due to corrosivity (D002) and E P Toxicity (D004, D005, D006, D008, and D010).	Hazardous Waste, Liquid, N.O.S.	NA9189
078	Plating shop floor sludge.	E P Toxicity (Cd) (Cr ⁺⁶) Reactivity (CN)	This solution is a Hazardous Waste due to E P Toxicity (D006) (D007) Reactivity (D003).	Hazardous Waste, Liquid, N.O.S.	NA9189
079	Plating shop air duct sludge.	pH, E P Toxicity (Cd, Cr ⁺⁶)	This solution is a Hazardous Waste due to corrosivity (D002) and E P Toxicity (D006, D007).	Hazardous Waste, Liquid, N.O.S.	NA9189
082	Pickling solution for aluminum alloys (nitric acid, hydrofluoric acid, sulfuric acid).	pH, E P Toxicity (Cd, Cr ⁺⁶)	This solution is a Hazardous Waste due to corrosivity (D002) and E P Toxicity (D006 and D007).	Waste Corrosive Liquid, N.O.S.	UN1760

TABLE C-1

<u>MO ID NO.</u>	<u>HAZARDOUS WASTE</u>	<u>HAZARDOUS PARAMETER</u>	<u>RATIONALE</u>	<u>DOT PROPER SHIPPING NAME</u>	<u>DOT ID NUMBER</u>
086	Metal treating solution in tooling manufacturing.	pH	This solution is a Hazardous Waste due to corrosivity (D002).	Waste Sodium Hydroxide Solution	UN1824
088	Scale conditioner for exotic scales on metals.	pH, Reactivity (CN)	This solution is a Hazardous Waste due to corrosivity (D002) (D003).	Hazardous Waste, Solid, N.O.S.	NA9189
089	Chromic acid sludge.	pH, E P Toxicity (Cd, Cr ⁺⁶ , Pb)	This solution is a Hazardous Waste due to corrosivity (D002) and E P Toxicity (D006, D007, D008).	Waste Corrosive Liquid, N.O.S.	UN1760
090	Sludge from nickel plating sludge.	E P Toxicity (Cd)	This solution is a Hazardous Waste due to E P Toxicity (D006).	Hazardous Waste, Solid, N.O.S.	NA9189
091	Miscellaneous acid sludges.	pH, E P Toxicity (Cd, Cr ⁺⁶)	This sludge is Hazardous Waste due to corrosivity (D002) and E P Toxicity (D007 and D008).	Waste Corrosive Solids, N.O.S.	UN1759
092	Miscellaneous alkaline sludges.	pH, E P Toxicity	This sludge is Hazardous Waste due to corrosivity (D002), E P Toxicity (D007 and D008), and reactivity (D003).	Waste Corrosive Solids, N.O.S.	UN1759

NOTE: Missing MO. I.D. Numbers indicate that the waste is not being generated at this time or is no longer classified as hazardous waste.

TABLE C-2
PARAMETERS AND TEST METHODS

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PARAMETER	TEST METHOD	REFERENCE
1. pH	Electrometric	Methods for Chemical Analysis of Water and Wastes EPA-600/4-79/020, March 1979
2. Flash Point	Pensky-Martens Closed-Cap Tester	ASTM STANDARD D-93-79 or D-93-80
3. E P Toxicity	E P Toxicity Test Procedure	40 CFR 261, Appendix II
4. Reactivity (Cyanide)	Distillation - Colori-metric	Standard Methods for the Examination of Water and Wastewater
5. Reactivity (Sulfide)	Methylene Blue	Standard Methods for the Examination of Water and Wastewater
6. Corrosivity	SAE 1020 Corrosion	National Association of Corrosion Engineers - Standard TM-01-69
7. Arsenic	Atomic Absorption	Methods for Chemical Analysis of Water and Wastes EPA-600/4-79/020, March 1979
8. Barium	Atomic Absorption	Methods for Chemical Analysis of Water and Wastes EPA-600/4-79/020, March 1979
9. Cadmium	Atomic Absorption	Methods for Chemical Analysis of Water and wastes EPA-600/4-79/020, March 1979
10. Chromium (VI)	Atomic Absorption	Methods for Chemical Analysis of Water and Wastes EPA-600/4-79/020, March 1979
11. Lead	Atomic Absorption	Methods for Chemical Analysis of Water and Wastes EPA-600/4-79/020, March 1979
12. Mercury	Atomic Absorption	Methods for Chemical Analysis of Water and Wastes EPA-600/4-79/200, March 1979
13. Selenium	Atomic Absorption	Methods for Chemical Analysis of Water and Wastes EPA-600/4-79/020, March 1979
14. Silver	Atomic Absorption	Methods for Chemical Analysis of Water and Wastes EPA-600/4-79/020, March 1979

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METHODS USED TO SAMPLE HAZARDOUS WASTES
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FREQUENCY OF ANALYSIS

<u>MO ID NO.</u>	<u>HAZARDOUS WASTE</u>	<u>ANALYSIS</u>	<u>FREQUENCY</u>	<u>SAMPLING METHOD</u>	<u>DESCRIPTION OF SAMPLING</u>	<u>REFERENCE FOR SAMPLER</u>
001	Waste Acid solution from Titanium metal surface cleaning. (Nitric & Chromic Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
002	Waste solution from nickel plating removal (Cyanide)	Reactivity (Cyanide)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/Chemical methods, EPA-SW-846.

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PARAMETERS AND TEST METHODS

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PARAMETER	TEST METHOD	REFERENCE
1. pH	Electrometric	Methods for Chemical Analysis of Water and Wastes EPA-600/4-79/020, March 1979
2. Flash Point	Pensky-Martens Closed-Cap Tester	ASTM STANDARD D-93-79 or D-93-80
3. E P Toxicity	E P Toxicity Test Procedure	40 CFR 261, Appendix II
4. Reactivity (Cyanide)	Distillation - Colori-metric	Standard Methods for the Examination of Water and Wastewater
5. Reactivity (Sulfide)	Methylene Blue	Standard Methods for the Examination of Water and Wastewater
6. Corrosivity	SAE 1020 Corrosion	National Association of Corrosion Engineers - Standard TM-01-69
7. Arsenic	Atomic Absorption	Methods for Chemical Analysis of Water and Wastes EPA-600/4-79/020, March 1979
8. Barium	Atomic Absorption	Methods for Chemical Analysis of Water and Wastes EPA-600/4-79/020, March 1979
9. Cadmium	Atomic Absorption	Methods for Chemical Analysis of Water and wastes EPA-600/4-79/020, March 1979
10. Chromium (VI)	Atomic Absorption	Methods for Chemical Analysis of Water and Wastes EPA-600/4-79/020, March 1979
11. Lead	Atomic Absorption	Methods for Chemical Analysis of Water and Wastes EPA-600/4-79/020, March 1979
12. Mercury	Atomic Absorption	Methods for Chemical Analysis of Water and Wastes EPA-600/4-79/200, March 1979
13. Selenium	Atomic Absorption	Methods for Chemical Analysis of Water and Wastes EPA-600/4-79/020, March 1979
14. Silver	Atomic Absorption	Methods for Chemical Analysis of Water and Wastes EPA-600/4-79/020, March 1979

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<u>MO ID NO.</u>	<u>HAZARDOUS WASTE</u>	<u>ANALYSIS</u>	<u>FREQUENCY</u>	<u>SAMPLING METHOD</u>	<u>DESCRIPTION OF SAMPLING</u>	<u>REFERENCE FOR SAMPLER</u>
001	Waste Acid solution from Titanium metal surface cleaning. (Nitric & Chromic Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
002	Waste solution from nickel plating removal (Cyanide)	Reactivity (Cyanide)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/Chemical methods, EPA-SW-846.

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001	Waste Acid solution from Titanium metal surface cleaning. (Nitric & Chromic Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
002	Waste solution from nickel plating removal (Cyanide)	Reactivity (Cyanide)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/Chemical methods, EPA-SW-846.

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003	Waste Acid solution from Oxide removal on aluminum and titanium surfaces. (Nitric Acid, Potassium Dichromate, Potassium Nitrate, Sodium Biflouride)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
004	Waste Acid solution from a chemical conversion coating process of aluminum and titanium surfaces.	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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003	Waste Acid solution from Oxide removal on aluminum and titanium surfaces. (Nitric Acid, Potassium Dichromate, Potassium Nitrate, Sodium Biflouride)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
004	Waste Acid solution from a chemical conversion coating process of aluminum and titanium surfaces.	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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005	Waste alkaline solution from paint stripping (Potassium Hydroxide with Phenol)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
006	Waste acid and chlorinated solvent from paint stripping (Hydrofluoric Acid with Phenol and Methylene Chloride)	pH; E P Toxicity (Cr ⁺⁶) Listed Waste	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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007	Waste acid solution from deoxidizing and cleaning aluminum surfaces. (Potassium Dicromate, Potassium Nitrate, Potassium Bifluoride)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
008	Waste acid solution from a chemical conversion coating process of aluminum and titanium surfaces (Chromic Acid, Fluorides, Ferricyanide)	pH; E P Toxicity (Cr ⁺⁶); Reactivity (Ferricyanide)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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009	Waste acid and chlorinated solvent solution from a coating removal operation. (Methylene Chloride, Formic Acid, Phenol)	pH; Listed Waste	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
010	Waste acid solution from aluminum metal surface cleaning (Sulfuric Acid, Sodium Dichromate)	pH; E P Toxicity	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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011	Waste acid solution from cleaning of aluminum tubing. (Nitric Acid, Ammonium Bifluoride)	pH	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
012	Waste acid solution from cleaning and pickling aluminum and titanium. (Nitric & Hydrofluoric Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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013	Waste acid solution from chromic acid anodizing of aluminum and titanium. (Chromic Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
014	Waste acid solution from an aluminum hard coating operation (Sulfuric and Oxalic Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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015	Waste acid solution from titanium pickle. (Nitric and Hydrofluoric Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
016	Waste acid from stainless steel pickle or pretreatment. (Hydrochloric Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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017	Waste solution from stripping cadmium plating. (Ammonium Nitrate)	pH; E P Toxicity (Cd)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
018	Waste acid solution from magnesium pickle (Chromic Acid, Ferric Nitrate, Potassium Fluoride)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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001	Waste Acid solution from Titanium metal surface cleaning. (Nitric & Chromic Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
002	Waste solution from nickel plating removal (Cyanide)	Reactivity (Cyanide)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/Chemical methods, EPA-SW-846.

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003	Waste Acid solution from Oxide removal on aluminum and titanium surfaces. (Nitric Acid, Potassium Dichromate, Potassium Nitrate, Sodium Biflouride)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
004	Waste Acid solution from a chemical conversion coating process of aluminum and titanium surfaces.	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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005	Waste alkaline solution from paint stripping (Potassium Hydroxide with Phenol)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
006	Waste acid and chlorinated solvent from paint stripping (Hydrofluoric Acid with Phenol and Methylene Chloride)	pH; E P Toxicity (Cr ⁺⁶) Listed Waste	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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007	Waste acid solution from deoxidizing and cleaning aluminum surfaces. (Potassium Dicromate, Potassium Nitrate, Potassium Bifluoride)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
008	Waste acid solution from a chemical conversion coating process of aluminum and titanium surfaces (Chromic Acid, Fluorides, Ferricyanide)	pH; E P Toxicity (Cr ⁺⁶); Reactivity (Ferricyanide)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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009	Waste acid and chlorinated solvent solution from a coating removal operation. (Methylene Chloride, Formic Acid, Phenol)	pH; Listed Waste	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
010	Waste acid solution from aluminum metal surface cleaning (Sulfuric Acid, Sodium Dichromate)	pH; E P Toxicity	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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011	Waste acid solution from cleaning of aluminum tubing. (Nitric Acid, Ammonium Bifluoride)	pH	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
012	Waste acid solution from cleaning and pickling aluminum and titanium. (Nitric & Hydrofluoric Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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013	Waste acid solution from chromic acid anodizing of aluminum and titanium. (Chromic Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
014	Waste acid solution from an aluminum hard coating operation (Sulfuric and Oxalic Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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015	Waste acid solution from titanium pickle. (Nitric and Hydrofluoric Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
016	Waste acid from stainless steel pickle or pretreatment. (Hydrochloric Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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017	Waste solution from stripping cadmium plating. (Ammonium Nitrate)	pH; E P Toxicity (Cd)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
018	Waste acid solution from magnesium pickle (Chromic Acid, Ferric Nitrate, Potassium Fluoride)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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019	Waste acid solution from cleaning and pickling aluminum and titanium. (Nitric & Hydrofluoric Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
020	Wast acid from stainless steel pickle or pre-treatment (Hydrochloric Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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021	Waste acid from a stainless steel cleaning process (Hydrofluoric and Sulfuric Acid)	pH	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
022	Waste acid solution and sludge from various metal etching & cleaning (Nitric, Chromic and Hydrofluoric Acid)	pH; E P Toxicity (Cr ⁺⁶) (Pb)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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023	Waste acid solution from metal surface passivation. (Nitric Acid)	pH	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
024	Waste alkaline solution from stripping of Chromium plating. (Sodium Hydroxide, Sodium Carbonate, Sodium Phosphate, Chromium)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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025	Waste alkaline solution derust cleaning of metal parts. (Sodium Hydroxide, Triethanolamine, Sodium Gluconate, Kerosene)	pH; E P Toxicity (Cr ⁺⁶) (Cd)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
026	Waste alkaline solution from cadmium cyanide plating operation (Sodium Cyanide, Sodium Hydroxide, Cadmium Oxide, Sodium Carbonate)	E P Toxicity (Cd) (NaCN)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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026	Waste Alkaline solution from cadmium cyanide plating operation (Sodium Cyanide, Sodium Hydroxide, Cadmium Oxide, Sodium Carbonate)	E P Toxicity (Cd) (NaCN)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
027	Waste acid solution from sulfuric acid anodizing of aluminum (Sulfuric Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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028	Waste Potassium Dischromate solution from anodize sealing	E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA- 600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
029	Waste alkaline cleaning solution from cleaning aluminum (Sodium Tripoly Phosphate, Sodium Borate, Sodium Nitrate, Sodium Chromate)	E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA- 600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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030	Waste alkaline solution from scale conditioning of titanium. (Sodium Hydroxide, Sodium Chromate)	E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
031	Waste Ferric Chloride solution from metal etching.	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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032	Waste acid from deoxidizing and cleaning aluminum surfaces.	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
033	Waste alkaline solution from derust cleaning of metal part. (Sodium Hydroxide, Triethanolamine, Sodium Gluconate, Kerosene)	pH; E P Toxicity (Cr ⁺⁶)(Cd)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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034	Waste acid solution from chemmilling of titanium.	pH	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
035	Waste alkaline solution from aluminum chemical milling.	E P Toxicity (Cr+6) and reactivty (S^{-2})	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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<u>MO ID NO.</u>	<u>HAZARDOUS WASTE</u>	<u>ANALYSIS</u>	<u>FREQUENCY</u>	<u>SAMPLING METHOD</u>	<u>DESCRIPTION OF SAMPLING</u>	<u>REFERENCE FOR SAMPLER</u>
001	Waste Acid solution from Titanium metal surface cleaning. (Nitric & Chromic Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
002	Waste solution from nickel plating removal (Cyanide)	Reactivity (Cyanide)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/Chemical methods, EPA-SW-846.

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001	Waste Acid solution from Titanium metal surface cleaning. (Nitric & Chromic Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
002	Waste solution from nickel plating removal (Cyanide)	Reactivity (Cyanide)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/Chemical methods, EPA-SW-846.

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003	Waste Acid solution from Oxide removal on aluminum and titanium surfaces. (Nitric Acid, Potassium Dichromate, Potassium Nitrate, Sodium Biflouride)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
004	Waste Acid solution from a chemical conversion coating process of aluminum and titanium surfaces.	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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005	Waste alkaline solution from paint stripping (Potassium Hydroxide with Phenol)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
006	Waste acid and chlorinated solvent from paint stripping (Hydrofluoric Acid with Phenol and Methylene Chloride)	pH; E P Toxicity (Cr ⁺⁶) Listed Waste	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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007	Waste acid solution from deoxidizing and cleaning aluminum surfaces. (Potassium Dicromate, Potassium Nitrate, Potassium Bifluoride)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
008	Waste acid solution from a chemical conversion coating process of aluminum and titanium surfaces (Chromic Acid, Fluorides, Ferricyanide)	pH; E P Toxicity (Cr ⁺⁶); Reactivity (Ferricyanide)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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009	Waste acid and chlorinated solvent solution from a coating removal operation. (Methylene Chloride, Formic Acid, Phenol)	pH; Listed Waste	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
010	Waste acid solution from aluminum metal surface cleaning (Sulfuric Acid, Sodium Dichromate)	pH; E P Toxicity	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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011	Waste acid solution from cleaning of aluminum tubing. (Nitric Acid, Ammonium Bifluoride)	pH	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
012	Waste acid solution from cleaning and pickling aluminum and titanium. (Nitric & Hydrofluoric Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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013	Waste acid solution from chromic acid anodizing of aluminum and titanium. (Chromic Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
014	Waste acid solution from an aluminum hard coating operation (Sulfuric and Oxalic Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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015	Waste acid solution from titanium pickle. (Nitric and Hydrofluoric Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
016	Waste acid from stainless steel pickle or pretreatment. (Hydrochloric Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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017	Waste solution from stripping cadmium plating. (Ammonium Nitrate)	pH; E P Toxicity (Cd)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
018	Waste acid solution from magnesium pickle (Chromic Acid, Ferric Nitrate, Potassium Fluoride)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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019	Waste acid solution from cleaning and pickling aluminum and titanium. (Nitric & Hydrofluoric Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
020	Wast acid from stainless steel pickle or pre-treatment (Hydrochloric Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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021	Waste acid from a stainless steel cleaning process (Hydrofluoric and Sulfuric Acid)	pH	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
022	Waste acid solution and sludge from various metal etching & cleaning (Nitric, Chromic and Hydrofluoric Acid)	pH; E P Toxicity (Cr ⁺⁶) (Pb)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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023	Waste acid solution from metal surface passivation. (Nitric Acid)	pH	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
024	Waste alkaline solution from stripping of Chromium plating. (Sodium Hydroxide, Sodium Carbonate, Sodium Phosphate, Chromium)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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025	Waste alkaline solution derust cleaning of metal parts. (Sodium Hydroxide, Triethanolamine, Sodium Gluconate, Kerosene)	pH; E P Toxicity (Cr ⁺⁶) (Cd)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
026	Waste alkaline solution from cadmium cyanide plating operation (Sodium Cyanide, Sodium Hydroxide, Cadmium Oxide, Sodium Carbonate)	E P Toxicity (Cd) (NaCN)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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026	Waste Alkaline solution from cadmium cyanide plating operation (Sodium Cyanide, Sodium Hydroxide, Cadmium Oxide, Sodium Carbonate)	E P Toxicity (Cd) (NaCN)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
027	Waste acid solution from sulfuric acid anodizing of aluminum (Sulfuric Acid)	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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028	Waste Potassium Dischromate solution from anodize sealing	E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA- 600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
029	Waste alkaline cleaning solution from cleaning aluminum (Sodium Tripoly Phosphate, Sodium Borate, Sodium Nitrate, Sodium Chromate)	E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA- 600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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030	Waste alkaline solution from scale conditioning of titanium. (Sodium Hydroxide, Sodium Chromate)	E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
031	Waste Ferric Chloride solution from metal etching.	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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032	Waste acid from deoxidizing and cleaning aluminum surfaces.	pH; E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
033	Waste alkaline solution from derust cleaning of metal part. (Sodium Hydroxide, Triethanolamine, Sodium Gluconate, Kerosene)	pH; E P Toxicity (Cr ⁺⁶)(Cd)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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034	Waste acid solution from chemmilling of titanium.	pH	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
035	Waste alkaline solution from aluminum chemical milling.	E P Toxicity (Cr+6) and reactivity (S^{-2})	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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036	Sludge from industrial waste water pretreatment plant.	Listed Waste	Each time a removal is made but not to exceed one sample in a 12 month period.	Solid waste samplers from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Page 11.	Composite sample using a trier scoop from six points in a nine cubic yard container.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
037	Water emulsified cutting oil from cutting and machining aluminum, titanium and ferrous base metals and alloys.	Mo. Listed Waste	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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038	Solid Hazardous Waste from aircraft painting & servicing.	E P Toxicity (Pb)	Each time a removal is made but not to exceed one sample in a 12 month period.	Solid Waste Samplers from "Samplers and Sampling Pro- cedures for Hazardous Waste Streams" EPA- 600/2-80-018, Page 12 & 13.	Composite Sample using a scoop from containers of solid waste.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
039	Explosive devices which have exceeded their service life or have been damaged so that they are not usable.	Explosive devices D.O.T. Class "B" and "C"				
040	Waste paint sludge from aircraft and building maintenance.	E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Solid Waste Samplers from "Samplers and Sampling Pro- cedures for Hazardous Waste Streams" EPA- 600/2-80-018, Page 12 & 13.	Composite Sample using a scoop from waterfalls in paint booths.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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036	Sludge from industrial waste water pretreatment plant.	Listed Waste	Each time a removal is made but not to exceed one sample in a 12 month period.	Solid waste samplers from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Page 11.	Composite sample using a trier scoop from six points in a nine cubic yard container.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
037	Water emulsified cutting oil from cutting and machining aluminum, titanium and ferrous base metals and alloys.	Mo. Listed Waste	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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038	Solid Hazardous Waste from aircraft painting & servicing.	E P Toxicity (Pb)	Each time a removal is made but not to exceed one sample in a 12 month period.	Solid Waste Samplers from "Samplers and Sampling Pro- cedures for Hazardous Waste Streams" EPA- 600/2-80-018, Page 12 & 13.	Composite Sample using a scoop from containers of solid waste.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
039	Explosive devices which have exceeded their service life or have been damaged so that they are not usable.	Explosive devices D.O.T. Class "B" and "C"				
040	Waste paint sludge from aircraft and building maintenance.	E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Solid Waste Samplers from "Samplers and Sampling Pro- cedures for Hazardous Waste Streams" EPA- 600/2-80-018, Page 12 & 13.	Composite Sample using a scoop from waterfalls in paint booths.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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041	Waste chlorinated solvents from metal cleaning and degreasing operations.	Trichlorethylene, methylene chloride, 1,1,1-trichloroethane (Listed Waste)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
042	Waste Jet Fuel contaminated with water.	Flash Point	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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043	Mixed Waste Solvents.	Acetone, xylene, toluene, methyl ethyl ketone (Listed Waste)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA- 600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coli-wasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
044	Waste hydraulic and motor oil.	Mo. Listed Waste	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA- 600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coli-wasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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045	Waste Coolant from metal cutting (triethanolamine, sodium nitrite, potassium chromate).	E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
046	Waste paint stripper (methylene chloride)	E P Toxicity (Pb) (Listed Waste)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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037	Waste Stoddard Sol- vent.	Flash Point	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA- 600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coli-wasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
048	Waste scale remover from cleaning boilers and cooling coils (hydrochloric acid).	pH	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA- 600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coli-wasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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049	Waste Solution and sludge from developing x-ray film, photos, microfiche and micro-film (silver sludge).	E P Toxicity (Ag)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
050	Empty containers which have contained hazardous waste.	Par. 261.33(c)				
052	Waste sodium bicarbonate with phenol.	E P Toxicity As	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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053	Waste sodium bicarbonate used to neutralize an acid spill.	E P Toxicity (Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Solid Waste Samplers from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Page 12 & 13.	Composite Sample using a scoop.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
054	Compressed Gases.	Par. 261.33				
056	Waste acid solution for stripping nickel plating.	E P Toxicity (Cd, Cr ⁺⁶ , Pb)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018. Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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057	Sodium hydroxide solids from fume scrubber.	pH	Each time a removal is made but not to exceed one sample in a 12 month period.	Solid Waste Samplers from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Page 12 & 13.	Composite Sample using a scoop from waterfalls in paint booths.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
059	Synthetic fuel (fuel oil and coal and water).	Mo. Listed Waste	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
061	Waste sodium hydroxide solution.	pH	Each time a removal is made but not to exceed one sample in a 12-month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 and 38.	A representative sample from a drum or tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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062	Waste solution from removal of organic coatings on various metals (formic acid, methylene chloride).	pH, E P Toxicity (Cd, Pb)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
065	Waste alkaline cleaner.	E P Toxicity (Pb)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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066	Chrome plating solution (chromic acid).	pH, E P Toxicity (Cd, Cr ⁺⁶ , Pb)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
067	Waste chrome plating sludge.	pH, E P Toxicity (Cd, Cr ⁺⁶ , Pb)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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068	Cadmium plating solution.	pH, E P Toxicity (Cd, Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
069	Plating solution for ferrous and non-ferrous alloys (nickel sulfamate, boric acid).	E P Toxicity (Cd)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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070	Phosphatizing of ferrous metal (phosphoric acid).	E P Toxicity (Cd, Pb) Reactivity (CN)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA- 600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwas, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
075	Mold material for die-casting metals.	pH, E P Toxicity (As, Ba, Cd, Pb, Se)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA- 600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwas, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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078	Plating shop floor sludge.	E P Toxicity (Cd) (Cr ⁺⁶) Reactivity (CN)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA- 600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
079	Plating shop air duct sludge.	pH, E P Toxicity (Cd, Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA- 600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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082	Pickling solution for aluminum alloys (nitric acid, hydrofluoric acid, sulfuric acid).	pH, E P Toxicity (Cd, CR ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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086	Metal treating solution in tooling manufacturing.	pH	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
088	Scale conditioner for exotic scales on metals	pH, Reactivity (CN)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA-600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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089	Chromic acid sludge	pH, E P Toxicity (Cd, Cr ⁺⁶ , Pb)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA- 600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coli-wasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
090	Sludge from nickel plating sludge	E P Toxicity (Cd)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA- 600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coli-wasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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091	Miscellaneous acid sludges.	pH, E P Toxicity (Cd, Cr ⁺⁶)	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA- 600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.
092	Miscellaneous alkaline sludges.	pH, E P Toxicity	Each time a removal is made but not to exceed one sample in a 12 month period.	Sampling a drum or storage tank from "Samplers and Sampling Procedures for Hazardous Waste Streams" EPA- 600/2-80-018, Pages 36 & 38.	A representative sample from a drum or a tank less than four feet deep using a coliwasa, or a composite sample from a tank deeper than four feet using a weighted bottle to grab samples at the top, middle, and bottom of the tank.	Test methods for the evaluation of solid waste. Physical/chemical methods, EPA-SW-846.

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	C-8	Typical Laboratory Analysis Report	C-68
	C-9	Typical Laboratory Analysis Report	C-69
	C-10	MAC Form 4605, "Hazardous Waste Chemical Analysis"	C-70
	C-11	MAC Form 4596, "Hazardous Chemical Waste Tag"	C-71
	C-12	MAC Form 1246, "Maintenance Work Order"	C-72
D	D-1	Hazardous Waste Storage, Tract I Acid/Alkali	D-3 and D-3A
	D-2	Hazardous Waste Storage, Tract I Cyanide Storage	D-4
	D-3	Hazardous Waste, Bldg. 10	D-5
	D-4	Hazardous Waste Storage, Chem-Mill Caustic Tanks	D-6
	D-5	Hazardous Waste Storage, Bldg. 52 East Tanks	D-7 and D-7A
	D-6	Hazardous Waste 6-750 Gallon Storage Tanks	D-8
	D-7	Hazardous Waste Hush House Waste Tank	D-9
	D-8	Hazardous Waste, Fuel Pit No. 3 Waste Tank	D-10
	D-9	Hazardous Waste Storage, F-18 Silencer Waste Tank	D-11
	D-10	Hazardous Waste, Bldg. 28 Waste Tank	D-12
	D-11	Hazardous Waste, Bldg. 06 Waste Oil Tank	D-13
	D-12	Hazardous Waste, Bldg. 14 Sludge Holding Tank	D-14
E		No figures included	

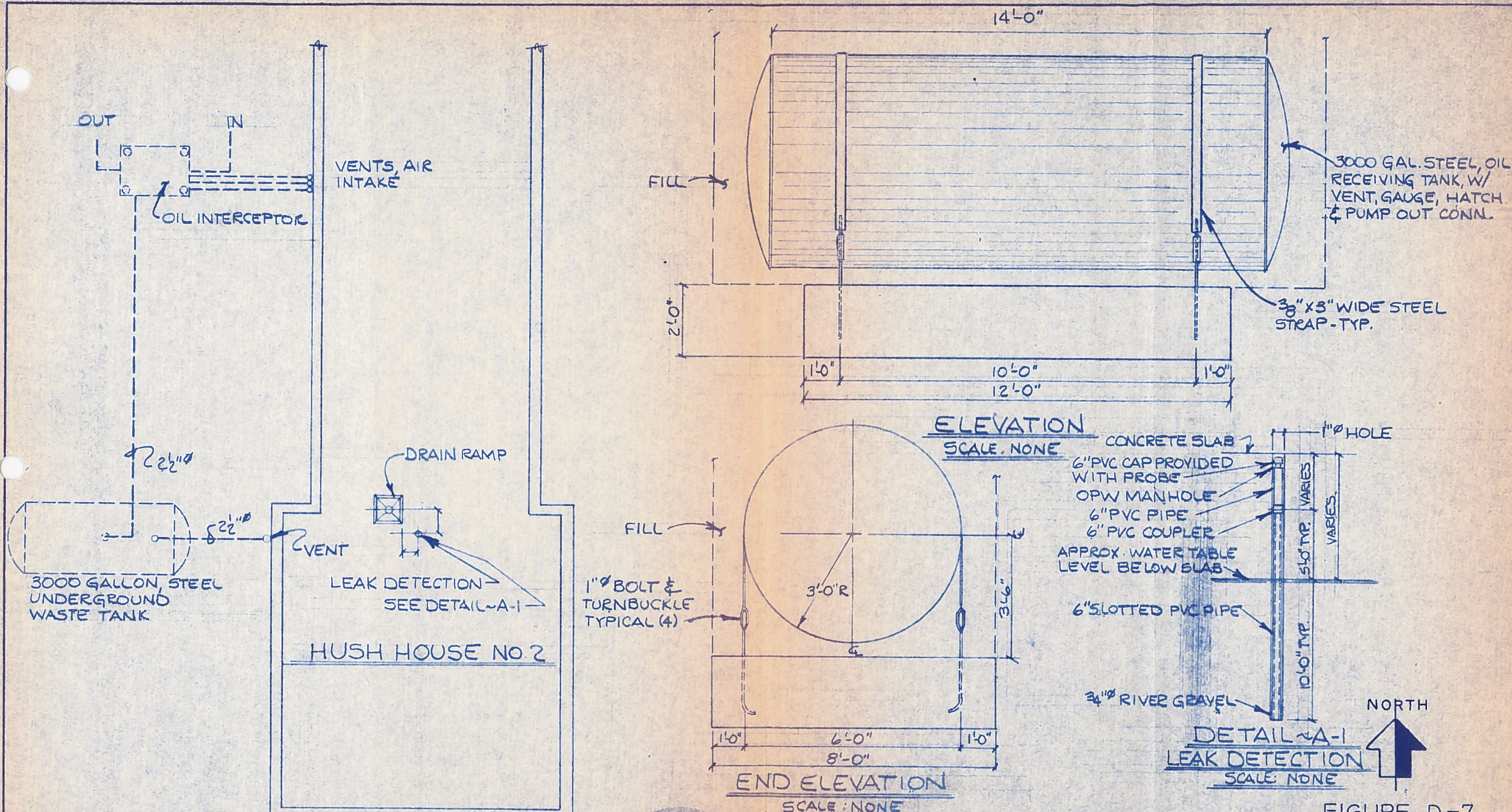
SECTION D
PROCESS INFORMATION

The information provided in this section is submitted in accordance with the requirements of 40 CFR Part 122.25(b)(1), (2), and (4) and 10 CSR 25-7.030 (3) and 7.050 (3) and (4). Other regulations addressed to complete this section include 40 CFR §264.17, §264.175, §264.176, §264.177, §264.191, §264.192, §264.198, §264.199, §264.252, §264.253, §264.256, and §264.257.

This section discusses specific process information for the storage of containers, and tanks. McDonnell Douglas Corporation - St. Louis (MDC - St. Louis) stores hazardous wastes at this facility in 55-gallon drum containers, underground, inground and above ground tanks and a containerized explosive storage building. The capability of these areas are as follows:

- I) Containers - 37,620 Gallons
- II) Two - 10,000 Gallon above ground tanks
- III) Five - 500 Gallon above ground tanks
- IV) Six - 750 Gallon above ground tanks
- V) One - 3,000 Gallon below ground tank
- VI) One - 2,000 Gallon below ground tank
- VII) One - 2,000 Gallon below ground tank
- VIII) One - 5,000 Gallon below ground tank
- IX) One - 1,000 Gallon below ground tank
- X) One - 120,000 Gallon inground tank
- XI) One - Explosive Storage Building - 30,300 Gallons - Containerized

These storage area designs were all certified by a registered professional engineer.



PLAN VIEW
HUSH HOUSE~WASTE TANK
 SCALE: NONE

END ELEVATION
 SCALE: NONE

ELEVATION
 SCALE: NONE

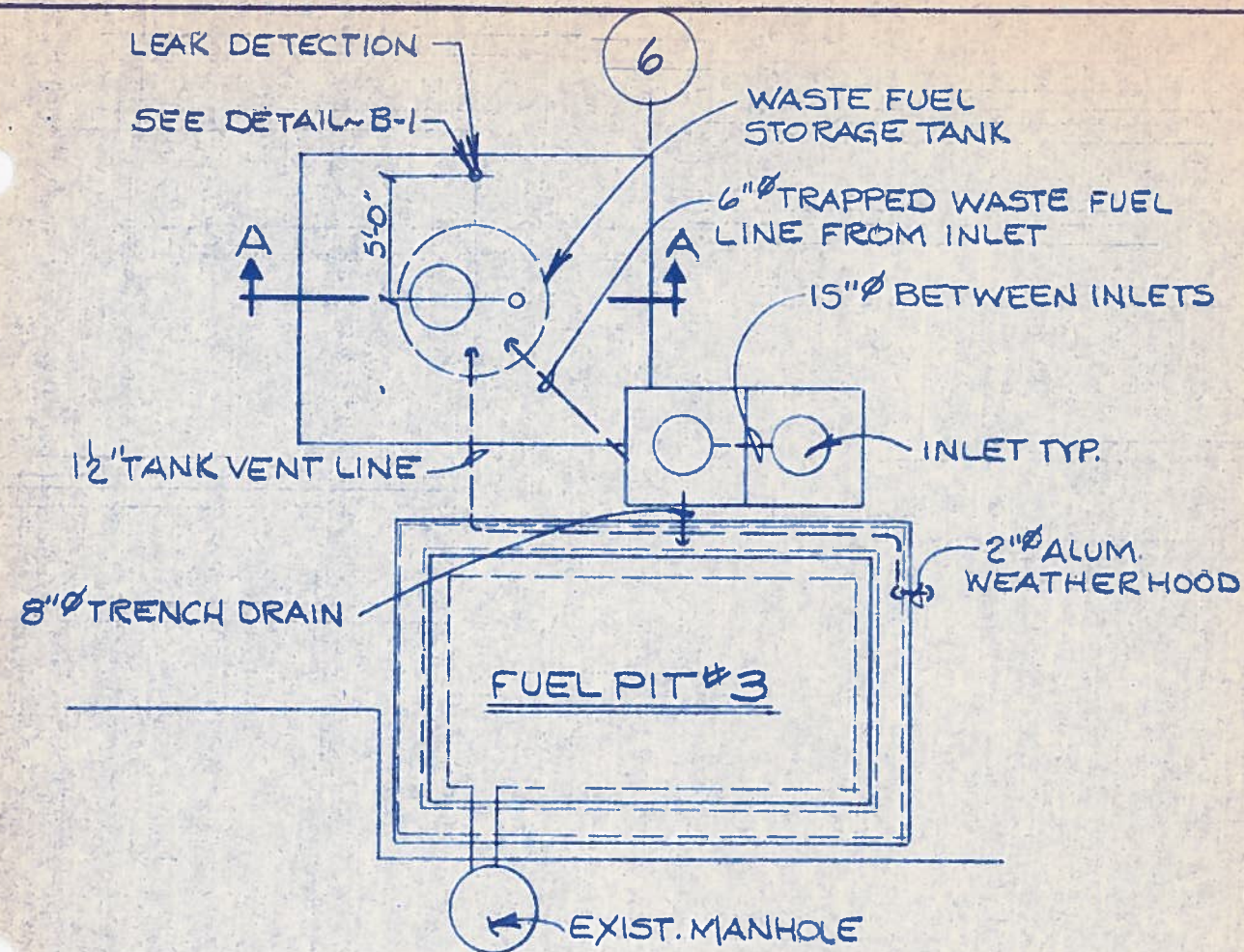
DETAIL A-1
LEAK DETECTION
 SCALE: NONE

FIGURE D-7

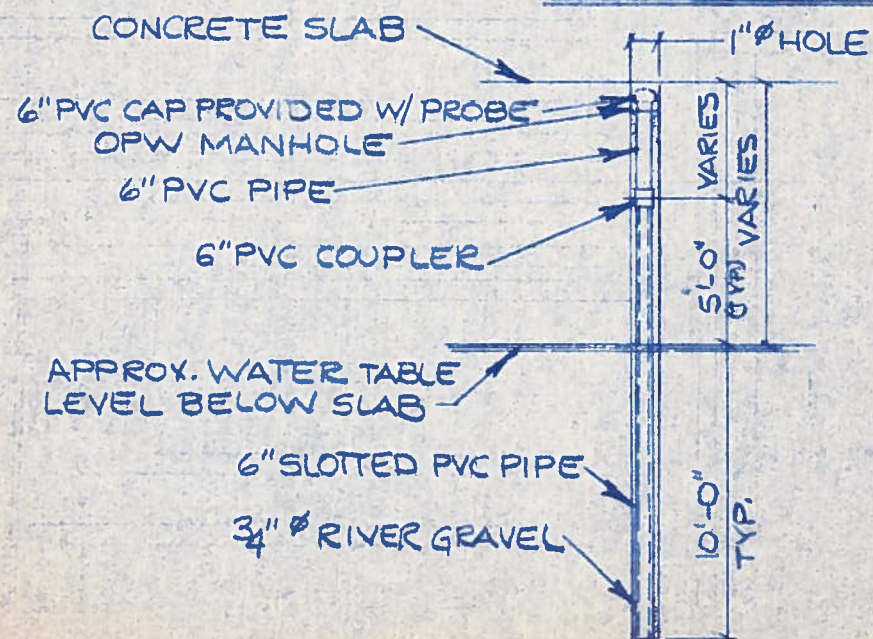
SCALE	AS SHOWN
DRAWN	K MOYER
APPROVED	<i>[Signature]</i> 9/27/82
APPROVED	<i>[Signature]</i> 9/27/82
R.F.F.O.	F.O.

MDC — ST. LOUIS HAZARDOUS WASTE HUSH HOUSE WASTE TANK
APPROVED FOR CONSTRUCTION
BY _____ DATE _____

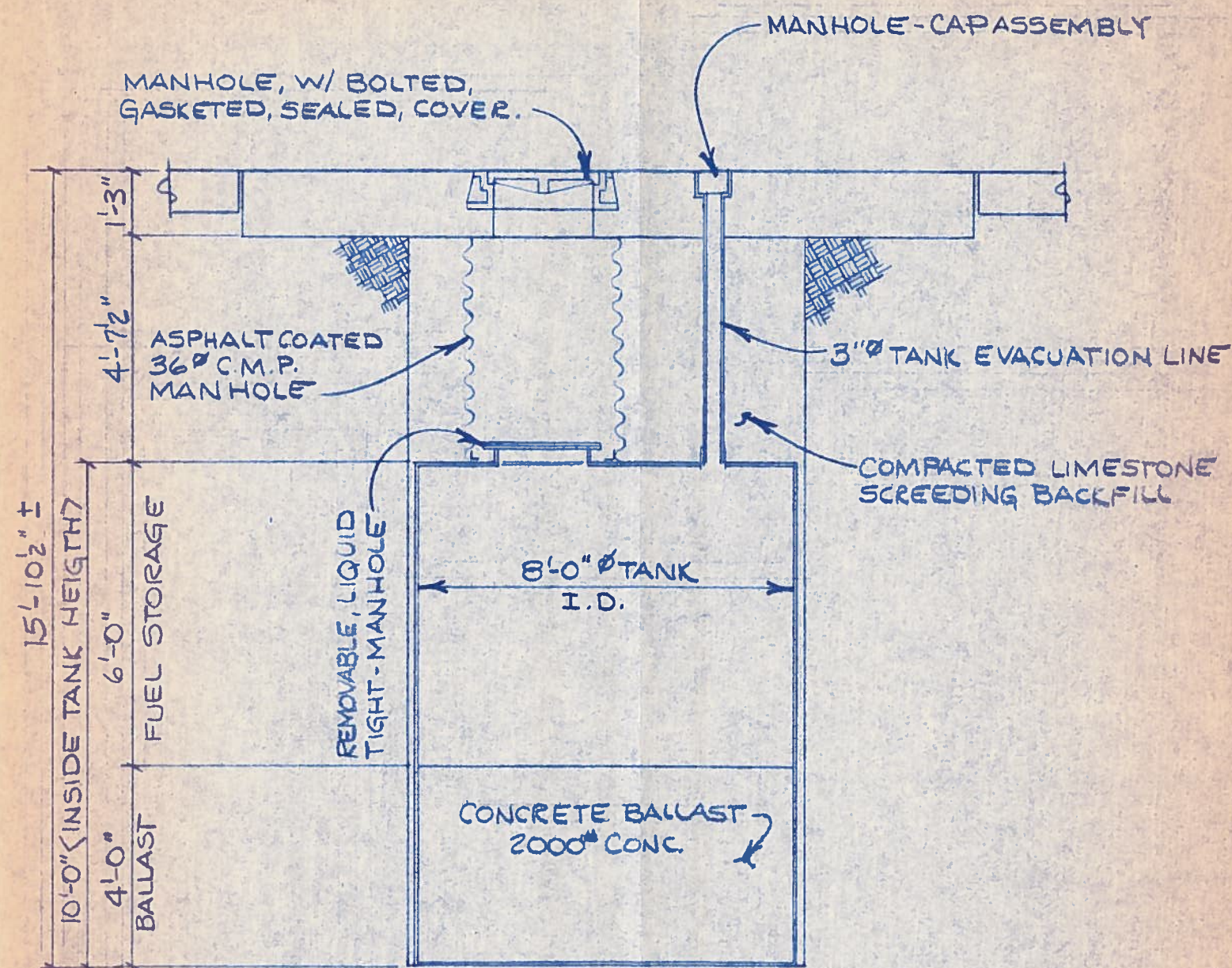
MCDONNELL AIRCRAFT COMPANY
MCDONNELL DOUGLAS CORPORATION
PLANT ENGINEERING
SKPE SHEET 1 OF 1



**PLAN VIEW
FUEL PIT & WASTE TANK**
SCALE: NONE



**DETAIL~B-1
LEAK DETECTION**
SCALE: NONE



**SECTION~A-A
STORAGE TANK**
SCALE: NONE



FIGURE D-8



SCALE	AS SHOWN	MDC — ST. LOUIS HAZARDOUS WASTE FUEL PIT NO. 3 "WASTE TANK"		MCDONNELL AIRCRAFT COMPANY	
DRAWN	K. MOYER			MCDONNELL DOUGLAS CORPORATION	
APPROVED	J. W. McManis 9/21/82	APPROVED FOR CONSTRUCTION		PLANT ENGINEERING	
APPROVED	Ed M. Moyer 9/27/82				
R.F.F.O.	F.O.	BY	DATE	SKPE SHEET 1 OF 1	

D-1a(4) Removal of Liquids From Collection System

Each of the separate containerized storage areas in Figures D-1 and D-2 have separate sump areas to allow for the removal of any leaks or spills. Discharges remain in the sumps until analyses indicate whether they are either hazardous or acceptable for release. If analyses indicate that a sump contains hazardous waste, the material is removed from the sump, drummed, labeled, and transferred to the appropriate container storage area.

D-1b Containers Without Free Liquids

D-1b(1) Test for Free Liquids

Containers that must have no free liquids are opened and visually inspected. If any free liquid is found, it is transferred to another container and labeled. An addition of inert liquid absorbing media is then added to the container of solids to absorb the final traces of free liquid. The container is then closed and stored in the storage areas described in D-1a.

D-1b(2) Description Of Containers

See section D-1a.

D-1b(3) Container Management Practices

See section D-1a.

D-1b(4) Container Storage Area Drainage

See section D-1a.

D-2 Tanks [40 CFR 122.25(b)(2)] (10 CSR 25-7.050(4)(A) and (B))

D-2a Description of Tanks

Two - 10,000 gallon capacity, vertical, above ground tanks provide 20,000 gallon storage for waste sodium hydroxide solution from chemical milling

of aluminum. These two tanks are designated as H-19 and H-20. This waste alkaline solution has a specific gravity of 1.3. Tanks and piping are constructed of carbon steel (Figure D-4). Each tank is structurally supported on a bed of crushed limestone. The limestone is held in place by the 3 inch thick asphalt spill pad that surrounds these tanks. This asphalt pad is surrounded by a 9 inch high asphalt curb. The area inside the curb is drained to our industrial waste water pretreatment plant. Each tank is equipped with a top and side manway, a vent/overflow, and a liquid level indicator. The inlet to these tanks is directly connected to the process tanks that generate this waste. The outlet of these tanks is piped directly to a pump that is used for loading disposal vehicles. These tanks are protected from disposal vehicle damage, by the strategic placing of 4 in. diameter concrete filled pipe guards on the traffic lane sides of this area.

Five - 500 gallon capacity, above ground tanks provide 2,500 gallon storage for waste nitric and hydrofluoric acid solution from chemical milling of titanium. These five tanks are designated as H-12, H-13, H-14, H-15, and H-16. This waste acid solution has a specific gravity of 1.3. All five tanks are open top, vertical, self supporting, flat bottom, cylindrical, one piece molded black polyethylene plastic. The tanks are structurally supported on a wooden platform. The tank outlets are interconnected with schedule 80 CPVC piping and valves. The tanks are covered with hinged tops to prevent precipitation from entering. The area under the tanks and platform is sealed with a 3 inch thick asphalt pad. This pad is surrounded by a 6 inch high asphalt curb. Inside the curb area is

a 4 inch depth of crushed limestone and a drain to our industrial waste water pretreatment plant (Figure D-5). The tank overflows are interconnected to allow an overfilled tank to flow into the remainder of the tanks. The inlet to these tanks is directly connected to the process tanks that generate this waste. The outlet of each tank connects to a common manifold drain line that terminates within the curb area. This manifold system is used for emptying the tanks.

Six - 750 gallon capacity, above ground tanks provide 4,500 gallon storage for waste nitric and hydrofluoric acid solution from chemical milling of titanium. These six tanks are designated as H-1, H-2, H-3, H-4, H-5 and H-6. This waste acid solution has a specific gravity of 1.3. All six tanks are open top, vertical, self supporting, flat bottom, cylindrical, one piece molded high density black polyethylene plastic. The tanks are structurally supported on a wooden platform. The tank outlets are interconnected with schedule 80 CPVC piping and valves. The tanks are closed with cap type covers to prevent precipitation from entering. The area under the tanks and platform is sealed with a 3 inch thick asphalt pad. This pad is surrounded by a 6 inch high asphalt curb. Inside the curb area is a 4 inch depth of crushed limestone and a drain to the previously mentioned Industrial waste water pretreatment plant (Figure D-6). Any overflow from these tanks will be handled by the above described curb and drain system. The inlet to these tanks is directly connected to the process tank that generates this waste. The outlet of each tank connects to a common manifold drain line that terminates within the curb area. This manifold system is used for emptying the tanks.

One - 3,000 gallon capacity, horizontal, below grade tank provides storage for waste turbine engine (Jet Aircraft) and hydraulic system spillage. This tank is designated as "Hush House Waste Tank". This waste hydrocarbon mixture has a specific gravity of 0.8. The tank is constructed of carbon steel and has been protected with a bituminous coating prior to burial. The tank is strapped to a concrete pad and completely surrounded with river sand. A concrete slab covers this tank as well as the entire area where the tank is located (Figure D-7). The tank is equipped with a liquid level sensing system that indicates when the tank is approximately 80% full. Leaks are monitored by a hydrocarbon sensing system that is installed in a monitoring well adjacent to this tank.

One - 2,000 gallon capacity, vertical, below grade tank provides storage for turbine engine (Jet Aircraft) fuel that is spilled during fueling or defueling operations. This tank is designated as "Fuel Pit No. 3 Waste Tank". This waste turbine engine fuel has a specific gravity of 0.8. The tank is constructed of 1/4" thick carbon steel with an ASME approved coal tar epoxy outer coating typical for underground tanks. The tank has a nominal capacity of 3,000 gallons but the bottom one third (1,000 gallon volume) is filled with concrete. A concrete slab covers this tank as well as the entire area where the tank is located (Figure D-8). The tank is equipped with a liquid level indicating system that sounds an alarm when the tank is approximately 75% full. Leaks are monitored by a hydrocarbon sensing system that is installed in a monitoring well adjacent to this tank.

One - 2,000 gallon capacity, horizontal, below grade tank provides storage for waste turbine engine (Jet Aircraft) and hydraulic system spillage. This tank is designated as "F-18 Silencer Waste Tank". This waste hydrocarbon mixture has a specific gravity of 0.8. The tank is an Owens Corning Fiberglass Model 2000 D-2, fiberglass storage tank for underground service. It has a nominal capacity of 2,000 gallons and an actual capacity of 2,130 gallons. A concrete slab covers this tank as well as the general area where the tank is located (Figure D-9). The tank is equipped with a liquid level sensing system that flashes an alarm when the tank is approximately 75% full. Leaks are monitored by a hydrocarbon sensing system that is installed in a monitoring well adjacent to this tank.

One - 5,000 gallon capacity, horizontal, below grade tank provides storage for jet aircraft fuels that are leaked or spilled during the testing of aircraft fuel systems. This tank is designated as "Bldg. 28 Waste Tank". This waste aircraft fuel has a specific gravity of 0.8. The tank is constructed of 1/4 inch thick carbon steel with three - 4 inch wide steel channel braces welded to the external surface of each end. A concrete slab covers this tank as well as the general area where the tank is located (Figure D-10). Leaks are monitored by a hydrocarbon sensing system that is installed in a monitoring well adjacent to this tank.

One - 1,000 gallon capacity, horizontal, below grade tank provides storage for oil that has been separated from the condensate of an oil lubricated, steam operated air compressor. This tank is designated as

"Bldg. 6 - Waste Oil Tank". This waste hydrocarbon mixture has a specific gravity of 0.9. This tank is an Air Therm Manufacturing Company Model 10 1/2 UG. It is constructed of 10 gauge carbon steel with an outer coating of black asphaltum. The tank is strapped to the concrete pad on which it rests. A concrete slab covers the area above this tank (Figure D-11). Leaks are monitored by a hydrocarbon sensing system that is installed in a monitoring well adjacent to this tank.

One - 120,000 gallon capacity, inground, tank provides storage for industrial waste water treatment sludge prior to dewatering. This tank is designated as "Bldg. 14 - Sludge Holding Tank". This waste has a specific gravity of approximately 1.1. This tank is an open top tank, constructed of reinforced concrete, a minimum of 12 inches in thickness. This tank was previously used a digester for anerobic decomposition of sanitary sewage sludge (Figure D-12). This inground tank is equipped with an overflow drain which leads to the influent of our waste water pre-treatment plant.

D-2b Tank Corrosion and Erosion

The two - 10,000 gallon waste sodium hydroxide storage tanks are constructed of carbon steel (Figure D-4). Since this waste is stored at ambient temperatures of 0°F to 100°F, the corrosion rate is less than would exist in dissolved air in water supply storage tanks. These tanks have been in service for a minimum of fifteen years with no signs of corrosion.

The five - 500 gallon waste nitric and hydrofluoric acid storage tanks are constructed of one piece molded black polyethylene plastic (Figure D-5). These tanks are considered completely inert to their contents.

The six - 750 gallon waste nitric and hydrofluoric acid storage tanks are constructed of one piece molded high density polyethylene plastic (Figure D-6). These tanks are considered completely inert to their contents.

The one - 3,000 gallon tank designated as "Hush House Waste Tank", (Figure D-7) is constructed of carbon steel and considered to be completely inert to the jet fuel and hydraulic fluids that it contains.

The one - 2,000 gallon tank designated as "Fuel Pit No. 3 Waste Tank", (Figure D-8) is constructed of carbon steel and considered to be completely inert to the jet fuel that it contains.

The one - 2,000 gallon tank designated as "F-18 Silencer Waste Tank" (Figure D-9) is constructed of fiberglass and is considered to be completely inert to the jet fuel and hydraulic fluids that it contains.

The one - 5,000 gallon tank designated as "Bldg. 28 - Waste Tank" (Figure D-10) is constructed of carbon steel and is considered to be completely inert to the jet fuel that it contains.

The one - 1,000 gallon tank designated as "Bldg. 6 - Waste Oil Tank" (Figure D-11) is constructed of carbon steel and is considered to be completely inert to the oil that it contains.

The one - 120,000 gallon tank designated as "Bldg. 14 - Sludge Holding Tank" (Figure D-12) is constructed of 12 inch steel reinforced concrete and since the sludge is in the pH range of 7.0 to 8.0, this solution will not attack the concrete.

F-2a /Continued/

adversely affect the environment or threaten human health. (Figure F-1)

F-2a (1) Types of Problems

Figure F-1 presents the schedule for inspecting monitoring equipment, security devices, operating and structural equipment in the contained storage areas and the tank storage areas.

F-2a (2) Frequency of Inspection

All storage areas at this facility, except for Bldg. 10 Reactive (explosive), are inspected on each workday. The reactive (explosive) storage area is inspected weekly.

F-2b Specific Process Inspection Requirements

F-2b (1) Container Inspection

Inspections of the container storage area is conducted per the inspection schedule provided in Figure F-1. Results of each inspection are recorded on this inspection log sheet. Information required on the log sheet, includes the inspector's signature, name, and date of inspection, area of inspection and discrepancies. The inspector is required to check the status of each area and indicate whether its condition is acceptable or unacceptable. Regardless of the status, observations are made as to the number of containers, aisle space, height of container stacking, inventory quantities, storage tank levels, containment curb integrity, and more. If the status of a particular item is unacceptable, this condition is brought to the attention of the specific area Maintenance Department by issuing a Maintenance Work Order Request that asks for immediate corrective action.

F-2b (2) Tank Inspection

Tank inspection are conducted per the inspection schedule provided in Figure F-1. Results of each inspection are recorded on this inspection log sheet. These tanks are not inspected internally. The above ground tanks are

DAILY INSPECTION LOG - TRACK I MDC ST. LOUIS

HAZARDOUS WASTE STORAGE FACILITIES

Date: 06 Oct 82
Revision No.: 0
(F)

MONTH	BLDG 6 OIL TANK	BLDG 14 SLUDGE TANK	BLDG 27 DRUM AREAS	BLDG 28 FUEL TANK	BLDG 52 TI ETCH TANKS	BLDG 52 AL ETCH TANKS	FUEL PIT #3 TANK	HUSH HOUSE TANK	BLDG 10 REACTIVE WASTE	DISCREPANCIES	INSPECTOR'S SIGNATURE
19 - -											
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
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29											
30											
31											

✓ = INDICATES FACILITY INSPECTED - NO DISCREPANCY

* = INDICATES FACILITY INSPECTED - DISCREPANCY NOTED

NOTE: SEE THE OPERATING MANUAL, HAZARDOUS WASTE STORAGE FACILITY, TRACT I FOR SPECIFIC INSPECTION INSTRUCTIONS PER 40 CFR 264.15 AND MO 10 CSR 25-7.011(3)(E).

F-2b /Continued/

inspected externally for leaks. The underground tanks, all of which contain hydrocarbons, are monitored by a hydrocarbon sensing system that is installed in monitoring wells located adjacent to these buried tanks.

F-2b (3) Waste Pile Inspection

No waste pile storage exists at this facility.

F-2c Remedial Action

If inspections reveal that non-emergency maintenance is needed, they will be completed as soon as possible to preclude further damage and reduce the need for emergency repairs. If a hazard is imminent or has already occurred during the course of an inspection or any time between inspections, remedial action will be taken immediately. MDC-St. Louis personnel will notify the appropriate authorities per the Contingency Plan and initiate remedial actions. In the event of an emergency involving the release of hazardous constituents to the environment, efforts will be directed towards containing the hazard, removing it, and subsequently decontaminating the affected area. Refer to the Contingency Plan for further details.

F-2d Inspection Log

The inspection log is maintained in a three-ring binder. The inspection log notebook is always kept with the inspection instructions in the Environmental Pollution Control Section office. Records of inspections are kept for at least 3 years from the date of inspection as required by regulation.

F-3 Waiver of Preparedness and Prevention Requirements

The applicant does not wish to request a waiver of the preparedness and prevention requirements under 40 CFR §264 Subpart C.

4. Local Authority Arrangements

MDC-St. Louis has its own security guard services of more than two hundred twenty-five (225 people). Security guards are constantly on duty. They are classified as licensed private watchmen by the St. Louis County Police Department and have the authority to arrest as would commissioned officers of the St. Louis County Police Department. These security guards and the above mentioned firemen constitute the local authorities in this situation. In respect to emergencies requiring hospitalization MDC-St. Louis uses the services provided by Christian Northwest Hospital for "non-burn" emergencies and St. John Mercy Hospital for "burn" emergencies. The "911" emergency telephone system is in effect for this community and would be used in the event an emergency exceeds MDC's capabilities.

5. Emergency Facilities

MDC-St. Louis has a complete medical facility which provides 24-hour medical treatment Monday thru Friday. First and second shift Saturday coverage if provided as required. Facilities include six first aid stations (one with x-ray equipment) plus a security guard vehicle which serves as an ambulance. The staff includes a full-time doctor on first shift and on emergency call at other times; nurses, and specially trained security guards to drive the ambulance.

6. Environmental Pollution Control

Environmental Pollution Control, a section of Plant Engineering, implements environmental procedures at the plant. In the event of a pollution emergency, a representative of this group monitors the emergency site and provides assistance and direction for controlling the emergency

6. Environmental Pollution Control /Continued/

and cleaning up the area. Environmental Pollution Control is also responsible for notifying the National Response Center (800-424-8802) if the situation requires such action.

7. Duties of Emergency Coordinator

In the event of a pollution emergency, the first person discovering the emergency shall notify the Fire Services at inplant telephone no. 22611 and the Guard Services Headquarters at inplant telephone no. 22821. They will in turn notify an emergency coordinator starting at the top and working down the list. The first person contacted shall be the emergency coordinator for that particular situation and shall act as an "on-site-coordinator" and shall coordinate all activities at the emergency site and shall remain there until the situation is over. Evacuating and cordoning the area is the responsibility of Security Services. The MDC-St. Louis Fire Chief shall decide if assistance is required from a local fire department.

E. (G-3) Implementation of the Contingency Plan

1. The decision to implement the contingency plan depends upon whether or not an imminent or actual incident could threaten human health or the environment. The purpose of this section is to provide guidance to the emergency coordinator in making this decision by providing decision-making criteria.

3. 3.1 (Continued)

<u>Location</u>	<u>Tank Capacity Gallons</u>	<u>Number of Tanks</u>	<u>Above or Below Ground</u>
Bldg. 066	5,000	2	Below
090	22,000	1	Below
101	500	1	Below
102	200	1	Above
102	1,000	1	Below
102	20,000	2	Below
106	5,000	1	Below
107	4,000	1	Below
121	100,000	1	Above
121	50,000	1	Above

3.2 GASOLINE

Bldg. 003	5,000	1	Below
003 (Unleaded)	8,000	1	Below
002	1,000	1	Below
022	7,500	1	Below
022	300	1	Above
022	10,000	1	Below
041 (Ramp)	8,000 (Each)	2	Below
062	500	1	Above
062	500	1	Above
066	300	1	Above
072	500	1	Above
091	500	1	Below
102	500	1	Above
121	1,000	1	Above
220	250	1	Above
250	500	1	Above
HQ (Unleaded)	5,000	1	Below
310	1,000 (Each)	2	Below

3.3 JP-4 (JET FUEL)

<u>Location</u>	<u>Tank Capacity Gallons</u>	<u>Number Of Tanks</u>	<u>Above or Below Ground</u>
Bldg. 028 (Trailer)	1,000	1	Above
028	5,000 (Waste)	1	Below
Hush House	3,000 (Waste)	1	Below
Bldg. 028	5,000 (Each)	2	Below
Ramp (Water Check Sta.)	11,500 (Total)(Trailers)	4	Above
Bldg. 041	15,000 (Each)	4	Below
062	5,000	2	Below
F-18 Engine Test Cell	1,000	1	Below

G. 3. (Continued)

3.5 If oil has already passed this location, then proceed with the Oil Spill Response Trailer to the intersection of Coldwater Creek and Highway I-270 South Service Road (9000 Pershall Road). Install the oil absorbing media and begin oil collecting using the floating skimmer as required. NOTE: Under normal flow conditions, oil discharged from Tract II will require seven (7) or more hours to reach Coldwater Creek and Pershall Road.

2.7 Record-Keeping and Reporting Requirements

This section includes the RCRA requirements for types of records, retention times, and reporting requirements.

Section 3 - Emergency Procedures and Contingency Plans

This section discusses the MDC-St. Louis Contingency Plan, Spill Prevention Control and Countermeasures Plan (SPCC), company Control Procedures relating to emergencies, and company Standard Maintenance Procedures as they apply to hazardous waste handling.

This manual is used for classroom training in a tiered manner to provide comprehensive training for some personnel and more limited training for others. Figure H-3 depicts the depth of training for various job classifications.

H-1c TRAINING PROGRAM PERSONNEL

This Training Program is conducted by members of the MDC-St. Louis Training Department (a highly qualified educational organization) under the technical direction of the Plant Environmental Control Section of the Plant Engineering Department. The Plant Environmental Control Section is staffed with a Chemistry major, a Biology/Chemistry major, a Geology/Biology major, and other engineering and technical personnel. In addition, mechanical, electrical, civil/structural and architectural engineering support is provided by the other branches of the Plant Design and Maintenance Engineering Department, which is currently staffed with approximately 75 engineers and technical personnel. (Copies of the job or position descriptions and the educational and experience backgrounds of the above personnel are on file in the company Personnel Division, and may be reviewed by EPA officials and Missouri DNR upon request).

I-1c Maximum Waste Inventory

1. Drum storage facility at Bldg. 27 scrap dock - 360 full drums and 396 empty drums.
2. Spent caustic tanks east of Bldg. 52 - 20,000 gallons.
3. Titanium etch storage tanks at Bldg. 52 - 37,620 gallons.
4. Steel chem-mill storage tanks at Bldg. 52 - 2,500 gallons.
5. Underground waste jet fuel tank, Bldg. 28 - 5,000 gallons.
6. Underground waste jet fuel tank at Fuel Pit #3 - 2,000 gallons.
7. Underground waste jet fuel tank behind hush house - 3,000 gallons.
8. Underground waste jet fuel tank by F-18 Silencer - 1,000 gallons.
9. Underground waste oil tank east of Bldg. 6 - 1,000 gallons.
10. Sludge holding tank at Bldg. 14 - 120,000 gallons.
11. The explosives storage facility, Bldg. 10 - 100 pounds.

I-1d Inventory Removal and Disposal or Decontamination of Equipment

1. Drum storage facility west of Bldg. 39: Remove all remaining drums and ship to EPA approved disposal facilities - four weeks. Remove corrosion from metal and empty and decontaminate sump - two weeks. Analyze asphalt overlay to determine if it is contaminated with hazardous waste - one week. Remove asphalt (if hazardous) and dispose of it at an EPA approved disposal facility - four weeks. Fill sumps with sand and seal with concrete - one week. Either convert the building to other use or demolish it and salvage the metal as scrap iron.

2. Spent caustic tanks east of Bldg. 52: Remove all liquid and sludge and dispose of it at an EPA approved disposal facility - four weeks. Hose down the inside of the tanks to remove any residue - one week. Disconnect the piping and pump and thoroughly decontaminate them - one week. Remove the tanks - two weeks. Remove any residue from the asphalt - one week. Analyze samples from asphalt and soil under tanks to determine if it is hazardous - one week. If hazardous, remove asphalt and soil to an EPA approved disposal facility.
3. Titanium etch storage tanks and steel chem-mill storage tanks at Bldg. 52: Remove all liquid and sludge and dispose of it at an EPA approved disposal facility - one week. Remove tanks, platform, and piping. Analyze samples from limestone under tanks to determine if it is hazardous - one week. If hazardous, dispose of it at an EPA approved disposal facility.
4. Underground oil and jet fuel tanks, Bldg. 6, Bldg. 28, Fuel Pit #3, behind hush house, and F-18 Silencer: Remove all oil and jet fuel - one week. Remove all sludge from the bottom of the tank and dispose of jet fuel and sludge at an EPA approved disposal facility - one week. Excavate and remove the tank - two weeks. Analyze the soil around the tank to determine if it is hazardous - one week. Remove contaminated soil, if required, and dispose of it at an EPA approved disposal facility - four weeks. Fill the hole or install a new tank - two weeks.

TABLE I-1

CLOSURE COST ESTIMATES

A. Drum Storage Facility West of Bldg. No. 39 (2 Shelters)

1. Dispose of all containers of hazardous waste at an EPA approved disposal facility.
2. Remove any corrosion from metal shelters surfaces, deposit in drums, dispose of at EPA approved disposal facility.
3. Remove asphalt floor overlay and curb. Deposit in drums and dispose of at an EPA approved disposal facility.
4. Fill sumps with sand, seal with concrete.
5. Dismantle shelters.

Total Estimated Cost: \$59,000.00

B. Spent Caustic Storage Tanks East of Bldg. No. 52 (2 Tanks)

1. Remove all liquid and sludge from tanks, dispose of at EPA approved disposal facility.
2. Decontaminate inside and outside of tanks.
3. Disconnect pumps, piping, valves and fittings - decontaminate.
4. Dispose of decontamination fluids and equipment at EPA approved disposal facility.
5. Remove tanks
6. Analyze asphalt and soil for contamination.
7. Remove contaminated asphalt and soil. Dispose of at EPA approved disposal facility.

Total Estimated Cost: \$27,000.00

TABLE I-1 (Continued)

C. Waste Acid Storage Tanks - Bldg. No. 52 (11 Tanks)

1. Remove all liquid and sludge from tanks. Dispose of at EPA approved disposal facility.
2. Decontaminate tanks and piping. Dispose of decontamination fluids at an EPA approved disposal facility.
3. Remove tanks, piping and platforms.
4. Analyze limestone and soil surrounding and under tanks, if contaminated remove and dispose of at EPA approved hazardous waste landfill.

Total Estimated Cost: \$23,000.00

D. Underground Waste Oil and Jet Fuel Storage Tanks (5 Tanks)

1. Remove all waste oil or jet fuel.
2. Remove all sludge and residue from tanks.
3. Dispose of waste oil, jet fuel, sludge and residue at an EPA approved disposal facility.
4. Evacuate and remove tanks.
5. Analyze surrounding soil, if contaminated, remove and dispose of at EPA approved hazardous waste landfill.
6. Fill in holes with fresh soil or limestone screenings.

Total Estimated Cost: \$68,000.00

E. Sludge Holding Tank - Bldg. 14

1. Remove all sludge, dispose of at an EPA approved facility.
2. Wash down walls and floor of concrete tank.
3. Flush all piping, pumps and centrifuges.

Total Estimated Cost: \$28,000.00

Date: 6 Oct 1982
Revision No.: 0
(I)

TABLE I-1 (Continued)

F. Explosives Waste Storage Facility - Bldg. No. 10

1. Remove all explosive devices and material.
2. Sweep down walls, shelves, ledges, floors, etc. Remove hazardous residue.
3. Dispose of explosive devices, material and residue at EPA approved TSD facility.
4. Demolish building and dispose of rubble at local landfill.

Total Estimated Cost: \$30,000.00

NOTE: All cost estimates assume the use of outside contract services and include 10% contingencies.

The owner or operator identified above owns or operates the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265. The current closure and/or post-closure cost estimates covered by the test are shown for each facility:

St. Louis Facility
\$ 235,000.
Tulsa Facility
\$ 3,300,000.

The owner or operator identified above guarantees, through the corporate guarantee specified in Subpart H of 40 CFR Parts 264 and 265, the closure and post-closure care of the following facilities owned or operated by its subsidiaries. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility:

None

In States where EPA is not administering the financial requirements of Subpart H of 40 CFR Parts 264 and 265, this owner or operator is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 CFR Parts 264 and 265. The current closure and/or post-closure cost estimates covered by such a test or shown for each facility:

None

The owner or operator identified above owns or operates the following hazardous waste management facilities for which financial assurance for the closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Subpart H of 40 CFR Parts 264 and 265 or equivalent or substantially equivalent State mechanisms. The current closure and/or post closure cost estimates not covered by such financial assurance or shown for each facility:

None

This owner or operator is required to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this owner or operator ends on December 31. The figures for the following items marked with an asterisk or derived from this owner's or operator's independently audited, year-end financial statements for the latest completed fiscal year, ended December 31, 1981.